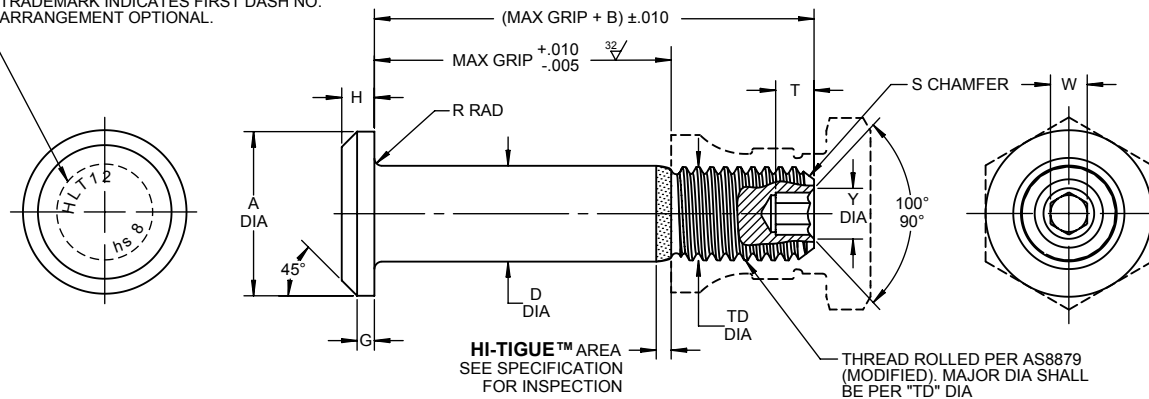


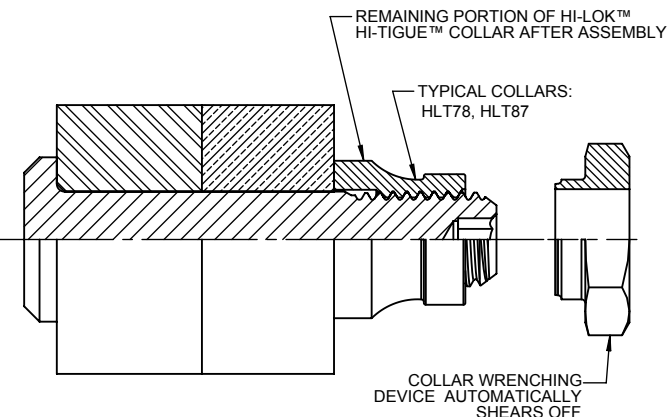
⑬

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INDENTED HEAD MARKING .010 MAX DEPTH. ⑬  
 MANUFACTURER'S TRADEMARK "hs" PER  
 SPEC 363. THE NUMBER(S) FOLLOWING  
 TRADEMARK INDICATES FIRST DASH NO.  
 ARRANGEMENT OPTIONAL.



HI-LOK™ HI-TIGUE™ PIN



HI-LOK™ HI-TIGUE™ PIN AND COLLAR AFTER ASSEMBLY

⑥

| FIRST<br>DASH<br>NO. | PIN<br>NOM<br>DIA | A<br>DIA     | B<br>REF | D DIA                                  |                                     | TD<br>DIA      | G<br>REF | H            | R<br>RAD     | S<br>CHAMFER<br>REF | THREAD<br>MODIFIED  | SOCKET         |              |              | DOUBLE<br>SHEAR<br>POUNDS | TENSION<br>POUNDS<br>MINIMUM | MIN.<br>GRIP<br>LENGTH |
|----------------------|-------------------|--------------|----------|----------------------------------------|-------------------------------------|----------------|----------|--------------|--------------|---------------------|---------------------|----------------|--------------|--------------|---------------------------|------------------------------|------------------------|
|                      |                   |              |          | WITHOUT<br>COATING<br>OR SOLID<br>FILM | WITH<br>COATING<br>OR SOLID<br>FILM |                |          |              |              |                     |                     | W<br>HEX       | T<br>DEPTH   | Y<br>DIA     |                           |                              |                        |
| 5                    | 5/32              | .322<br>.306 | .312     | .1695<br>.1690                         | .1695<br>.1685                      | .1595<br>.1570 | .030     | .060<br>.055 | .025<br>.015 | 1/32 x 37°          | .1640-32<br>UNJC-3A | .0645<br>.0635 | .100<br>.080 | .090<br>.075 | 4,210                     | 2,180                        | 2                      |
| 6                    | 3/16              | .377<br>.357 | .325     | .1955<br>.1950                         | .1955<br>.1945                      | .1840<br>.1810 | .035     | .074<br>.064 | .025<br>.015 | 1/32 x 37°          | .1900-32<br>UNJF-3A | .0806<br>.0791 | .100<br>.080 | .119<br>.104 | 5,550                     | 2,750                        | 2                      |
| 8                    | 1/4               | .440<br>.415 | .395     | .2555<br>.2550                         | .2555<br>.2545                      | .2440<br>.2410 | .045     | .090<br>.080 | .025<br>.015 | 1/32 x 37°          | .2500-28<br>UNJF-3A | .0967<br>.0947 | .110<br>.090 | .142<br>.122 | 9,620                     | 5,820                        | 2                      |
| 10                   | 5/16              | .505<br>.475 | .500     | .3180<br>.3175                         | .3180<br>.3170                      | .3060<br>.3020 | .055     | .112<br>.102 | .030<br>.020 | 3/64 x 37°          | .3125-24<br>UNJF-3A | .1295<br>.1270 | .130<br>.110 | .180<br>.160 | 14,890                    | 9,200                        | 2                      |
| 12                   | 3/8               | .600<br>.565 | .545     | .3805<br>.3800                         | .3805<br>.3795                      | .3680<br>.3640 | .075     | .140<br>.130 | .030<br>.020 | 3/64 x 37°          | .3750-24<br>UNJF-3A | .1617<br>.1582 | .160<br>.140 | .217<br>.197 | 21,430                    | 14,000                       | 3                      |
| 14                   | 7/16              | .676<br>.641 | .635     | .4430<br>.4425                         | .4430<br>.4420                      | .4310<br>.4260 | .095     | .160<br>.150 | .030<br>.020 | 3/64 x 37°          | .4375-20<br>UNJF-3A | .1930<br>.1895 | .190<br>.170 | .253<br>.233 | 29,000                    | 18,900                       | 4                      |
| 16                   | 1/2               | .770<br>.735 | .685     | .5055<br>.5050                         | .5055<br>.5045                      | .4930<br>.4880 | .095     | .188<br>.178 | .030<br>.020 | 3/64 x 37°          | .5000-20<br>UNJF-3A | .2242<br>.2207 | .220<br>.200 | .289<br>.269 | 37,900                    | 25,500                       | 4                      |

SEE COLLAR STANDARDS  
 FOR COLLAR STRENGTHS.  
 LOWER STRENGTH (PIN OR  
 COLLAR) DETERMINES  
 SYSTEM STRENGTH

HLT12

"HI-LOK", "HI-TIGUE", AND "HI-KOTE",  
 ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY  
 VAN

DATE  
 1968-07-01

APPROVED  
 R. TING

DATE  
 1968-07-25

REVISION  
 ⑬

DATE  
 M.BEARD  
 2017-05-17

TITLE  
 HI-LOK™ HI-TIGUE™ PIN  
 PROTRUDING TENSION HEAD  
 TITANIUM  
 1/16 GRIP VARIATION

DRAWING NUMBER  
**HLT12**

1 OF 2

1. Concentricity: "A" to "D" diameter within .010 FIM.
2. Dimensions are in inches and to be met after finish.
3. Surface texture per ASME B46.1.
4. Hole preparation per NAS618 (Column B) for interference application.
5. Use HLT112 for oversize replacement.
6. Minimum required for head and HI-TIGUE™ feature.
7. After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in European Union.

**HEAT TREAT:** 160,000 psi tensile minimum (95,000 psi shear minimum).

|    |                 |                                                                                                                                                                                                          |
|----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7  | HLT12AP( )-( )  | = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 and cetyl alcohol lube per Hi-Shear Spec. 305.                                                                                            |
|    | HLT12TB( )-( )  | = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.                                                                                                      |
|    | HLT12UV( )-( )  | = Anodize per Hi-Shear Spec. 306, Type II, HI-KOTE™ 2 solid film lube per Hi-Shear Spec 292 (spray only) and cetyl alcohol lube (water base) per Hi-Shear Spec. 305.                                     |
|    | HLT12NKJ( )-( ) | = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 with color silver on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.                                                         |
|    | HLT12NKK( )-( ) | = Sulfuric acid anodizing per ISO8080 and HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only with color silver on thread end and cetyl alcohol lube per Hi-Shear Spec. 305. |
|    | HLT12NKL( )-( ) | = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only with color silver on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.                                         |
| 13 | HLT12HK( )-( )  | = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.                                                                                                                                                 |

**CODE:** First dash number indicates nominal diameter in 1/32nds.  
Second dash number indicates maximum grip in 1/16ths.  
See Finish note for explanation of code letters.

**EXAMPLE:**

HLT12AP8-8

Diagram illustrating the structure of a pin part number, showing the relationship between the pin's physical dimensions and its nomenclature:

- 8/16 or 1/2 Maximum Grip Length
- 8/32 or 1/4 Nominal Diameter Pin
- Finish Code
- Pin Basic Part Number

# HLT12